

TABLE 1. Cleanup Levels

Contaminant	Groundwater (µg/L) ^a	Soil (mg/kg) ^b		Air ^f (µg/m ³)
VOCs:				
Tetrachloroethene	5.0	4		3.3
Trichloroethene	5.0	2		1.1
Cis-1,2-Dichloroethene	70	14		37
Vinyl chloride	0.15	0.02		0.22
Chlorobenzene	100	124		--
1,4-Dichlorobenzene	75	264		--
Trans-1,2-Dichloroethene	--	--		73
Lead	15	750 ^c		--
PAHs (SVOCs):	(dissolved phase)	(subsurface) ^e	(surface) 4 ^d	--
Total Carcinogenic	--	--		
Acenaphthene	420	160		
Anthracene	2100	3700		
Benz(a)anthracene	0.48	13		
Benzo(a)pyrene	0.048	3		
Benzo(b)fluoranthene	0.48	45		
Benzo(k)fluoranthene	4.79	450		
Chrysene	48	1400		
Dibenzo(a,h)anthracene	0.048	6		
Fluoranthene	280	1000		
Fluorene	280	160		
Indeno(1,2,3-cd)pyrene	0.48	130		
Naphthalene	28	3		
Pyrene	210	1100		
Petroleum ^e	(dissolved phase)	(subsurface)	(surface)	--
C9-C18 Aliphatics	1000	5000	2500	
C19-C36 Aliphatics	1000	5000	5000	
C11-C22 Aromatics	1000	400	750	
Total ceiling for petroleum hydrocarbons	1000	5000	5000	
Free product on top of groundwater (diesel fuel)	Less than 1/8 inch ^g	--		--
Asbestos/solid waste limited to cinder pile ^h	18-inch infiltration layer 6-inch erosion layer, fully vegetated			

- a) µg/L is equivalent to parts per billion. Groundwater levels are from Circular WQB-7, Montana Numeric Water Quality Standards, September 1999.
- b) mg/kg is equivalent to parts per million. VOC soil levels were calculated using a fate and transport model developed by RETEC. Mathematical Model for Calculation Soil Cleanup Criteria Based on Leaching to Groundwater, RETEC undated.
- c) EPA Technical Review Workgroup for Lead, Dec. 1996, *Recommendations of the Technical Review Workgroup for Lead for an Interim Approach to assessing Risks Associated with Adult Exposures to Lead in Soil* including the TRWL Guidance Document, April, 1999. This is a screening level, refer to Section X for more detail.
- d) The cleanup level was calculated using DEQ's March 2000 *Risk-Based Corrective Action (RBCA) Tier I* spreadsheets and site-specific assumptions. The cleanup level developed represents a total carcinogenic PAH concentration. This concentration is based on the toxicity of benzo(a)pyrene. The relative toxicity of each carcinogenic PAH to benzo(a)pyrene is used to adjust its concentration. Following this adjustment the resulting concentrations are summed. The summed exposure point concentration must not exceed the total carcinogenic PAH cleanup level.
- e) Values obtained from DEQ's *Tier I Risk-Based Corrective Action Guidance Document*, Final Draft, March 2000. These are screening levels, refer to Section X for more detail.
- f) Ambient air screening levels obtained from EPA Region IX Preliminary Remediation Goals, November 2000. These are screening levels, refer to Section X for more detail.
- g) Value obtained from 40 CFR 280.64 (2000) and 40 CFR 280.43 (2000), and ARM 17.56.407 (2001).
- h) Value obtained from ARM 17.50.530 (2001).

